Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



AZ81.8 JARM INDEX

October 1969

Machines In the Vegetable Garden

also in this issue:

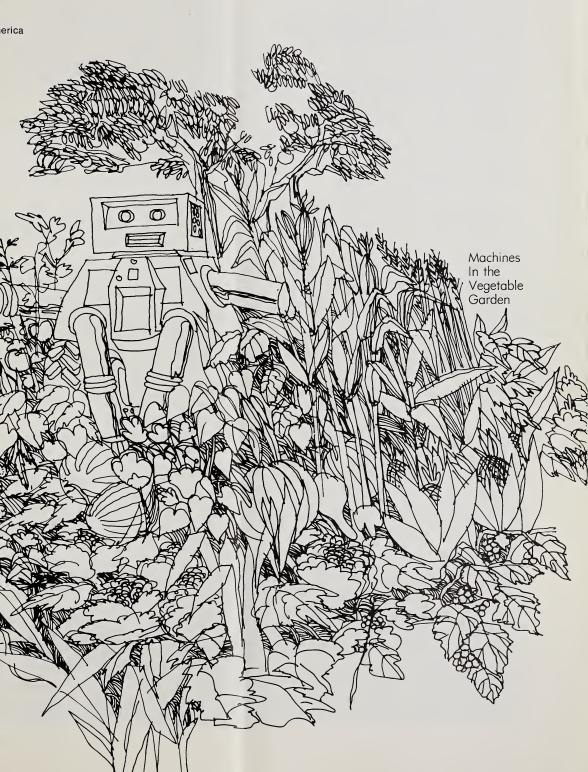
Help Wanted *
Apply Within Rural America

Marketing's Bite of the Food Bill

Problems In World Produce Trade

Leaving the Lunch Box Behind

U.S.
Department
of Agriculture
Economic
Research
Service



THE AGRICULTURAL OUTLOOK

The rewrite men. U.S. farmers are busy rewriting the record books again this year—as crop, livestock, and total farm output are all slated to reach new highs.

As of September 1, total farm production was expected to edge past the 1968 level by 1 percent. Crop and livestock output each were up about 1 percent from last year.

Unlike most years, the stars of the 1969 crop picture are not big name grains but other items—notably the sugar, oil, and fruit and vegetable crops.

Sweet prospects. Sugarbeet farmers this month are digging up what should be the largest crop in U.S. history. Production as of early September was put at about a tenth more than 1968's record output and a third higher than the 1961–65 average. The supersize beet crop should more than offset a moderate cutback in 1969 cane output.

Big but not bumper crops of most deciduous fruits and nuts seemed likely in September. Apple output looked as if would top 1968's by at least a fifth. Pears promised to be up 16 percent; grapes, 8 percent; and peaches, 5 percent.

The tree nut harvest, as of September, seemed to be bettering the 1968 level by about a fifth. Almonds were ascending to the highest volume level on record. And there were 20 percent more pecans and about a tenth more walnuts in prospect for this year than last.

Total reaping of food grains and feed grains won't soar to any new highs in 1969, however. Acreage is way down from last year, due to cuts under the wheat and feed grain programs occasioned when supplies built up. Food grain output is down sharply from last year's record level; total feed grain production will probably be off slightly.

Still, a number of individual grain crops will

be setting yield records this year. The all wheat yield per acre is expected to average 30.6 bushels, well above the 28.4 bushels of last year. Corn for grain should yield 78.8 bushels per acre, 0.2 bushel more than the previous high of 1967. And the national barley yield, as of September 1, was forecast at 44.4 bushels per acre, 0.7 above 1968.

Soybean production, as of September 1, was slightly below last year's, but total oil crop output in 1969 probably will match that of 1968, which was record large. Peanut output is expected to set a new record.

The cotton crop, which looked as if it would top the 1968 total by 1 percent in early September, is still a fourth smaller than the 1961-65 average.

What's going into this year's output? About \$38½ billion worth of production items and services. That's well over \$2 billion more than farmers paid out in 1968.

Prices paid for production items (including interest, taxes, and wages) have been up $5\frac{1}{2}$ percent from a year ago. In addition, farmers appear to be buying more of several important inputs such as feeder livestock, feed, and fertilizer.

Paying more will still pay off for farmers. Gains in gross income are expected to surpass the increases in farmers' production costs in 1969—and farmers should end up with higher net incomes this year than last.

Per farm average realized net income of \$5,044—the record set in 1966—should be bested this year as net income rises and farm numbers fall. Livestock producers should come out best of all. Receipts from livestock have been up substantially this year.

Also implied is some improvement this year in personal incomes of farm people compared with earnings of other citizens. Last year, farm people's per capita income from all sources (after taxes) averaged 73 percent of that for the nonfarm population. A better ratio is in prospect this year.

Machines In the Vegetable Garden

Vegetable and fruit farmers have been slower than most to use machines. But economists see a speedup during the next 5 years -especially for vegetable crops.

Making machines to plant and pick vegetables might seem easier than making machines to reach the moon. But while man was harvesting his first "crop" from the moon, many a field of vegetables on earth was being picked by hand.

But, considering accomplishments in space and other sciences, engineering possibilities in the production of vegetables seem to be well within reach and mostly a matter of time, effort, and economics.

it is expected to increase to 73 percent.

Production of vegetables for processing—such as potatoes, peas, and snap beans-is already pretty well mechanized, and further technological advances are likely to revolve mainly around substitution of larger, more efficient machines for outdated or older models.

Tomatoes, lettuce, cucumbers, and onions are projected to show substantial rises in mechanization, too. Only fresh tomatoes will be less than 50 percent mechanized by 1975. (Mechanized pickers, however, are already handling the bulk of tomatoes

destined for processing.)

And even the many crops that still depend on "stoop labor" and hand help-vegetables for the fresh market, nuts, and a wide variety of specialty crops. ranging from rhubarb to rutabagas—will undoubtedly moving into the machine age, although mechanization possibilities for some are still limited.

One reason why mechanization of vegetables-and fruit and nut crops, too-has lagged behind other crops is because they are less amenable to mechanization. Another is that men to do the work at a reasonable cost have been available.

But the cost of labor is going up about 50 percent faster than the cost of farm machinery.

Since 1950, farmers have spent about one-half less on labor and a third more on power and machinery as rising labor costs provided the incentive to buy machinery despite high initial costs.

Eighty million more tons of vegetables a year will be pro-



of labor (man-hours) will decline by 27 percent—from 265 million to 194 million hours. And machines will be responsible for the difference.

The total number of man-hours required at harvesttime are projected to decline by 40 percent—from 163 million hours to 98 million hours by 1975. Per acre, the drop will be from 38 to 21 manhours.

Pre-harvest activity will probably not be affected as much by mechanization as harvesttime work, so that total hours per acre required for production are not expected to decline by more than one-third—from 62 to 42 hours.

Unskilled and migrant jobholders will be the workers most likely to be jolted by the switch to machines in vegetable production. But eventually, adoption of the new technology should result in a smaller, more stable, better paid, and more highly skilled farm work force.

And rising labor costs for more skilled workers should prod farmers to continue their efforts to develop more highly mechanized means of production. (1)

Mechanization of Fruit, Vegetable Work Could Cut 450,000 Jobs

The coming of machines to the Nation's fruit and vegetable fields could ultimately mean the loss of roughly 450,000 jobs for seasonal farmworkers.

Where will these people go? What will they do?

A good many may simply drop out of the labor force entirely.

The general distribution of the total hired farm working force would imply that about 335,000—or four-fifths of the total—would fall into the category of seasonal workers out of the labor force most of the year.

Students make up the bulk of this group; the rest are housewives or retired persons seeking

MORE MACHINES, FEWER MAN-HOURS PREDICTED FOR VEGETABLE PRODUCTION

	Percentage change					
Vegetables	Har	vest	To	otal	Harvest	Total
	1964-68	1975	1964-68 1975		1964-68 to 1975	
	Mil. hrs.	Mil. hrs.	Mil. hrs.	Mil. hrs.	Percent	Percent
Potatoes	36.6	16.0	63.0	37. 9	-56	-4C
Tomatoes	35.3	25.6	53.8	43.1	—27	-20
Fresh	15.4	13.4	23.2		-13	-
Processing	19.9	12.2	30.6	_	-39	_
Corn, sweet	7.5	4.8	13.4	10.4	-36	-22
Fresh	5.8	2.9	8.7		-50	_
Processing	1.7	1.9	4.7		+12	-
Lettuce	13.1	8.7	22.9	17.9	-34	-22
Onions	7.0	4.3	12.0	9.0	—39	25
Cabbage	5.9	3.5	10.2	7.8	-41	-24
Carrots Cucumbers	5.5 12.7	4.2 7.8	7 .9 19.9	6.5 15.3	-24 -39	-18 -23
Beans, snap	12.1	1.9	16.9	5.6	-84	-67
Fresh	10.1		11.1			_
Processing	2.0		5.8	_		_
Sweet potatoes	6.3	2.3	13.5	8.5	-63	-37
Peas, green	2.7	2.4	4.5	4.4	-11	– 2
All other vegetables	17.8	16.5	27.4	27.5	_ 7	2
Total	162.5	98.0	265.4	193.9	-40	-27

¹ USDA-ERS estimates of man-hours required for commercial production. ² Under 0.5 percent.

supplemental income from parttime work.

Such workers undoubtedly will lose out on jobs as the machines move in. Mechanization will cut their incomes by about \$200 a year—which is the average annual earning from farmwork for persons working less than 75 days.

Another 60,000 of the 450,000 total would be expected to fall into the category of persons who are usually employed as farm operators or in nonfarm enterprises most of the year, but also take on seasonal farm jobs. These people, too, will lose out on their seasonal farmwork and the supplemental earnings it provides.

Machines will probably take their greatest toll in employment of a group which numbers around 56,000 persons.

They are full-time migrant workers and people whose main single activity during the year is farmwork but who work at it less than 150 days annually.

These people will have to make some major adjustments in how they earn a living when the machines come. And the change will probably be most difficult for the middle-aged and the Negro and other races.

These are the groups whose commitment to hired farmwork has been greatest, and who because of stage of life, lack of education, or other factors associated with their age and background have the least likelihood of obtaining other suitable employment.

Because of the wide geographic

distribution of fruit and vegetable production, the workers affected by mechanization are not concentrated in any one region of the country, so the manpower problems that do arise will also be widely distributed.

Some are likely to occur in home base areas. But migrant workers who find themselves displaced may drop out in an area they have become familiar with in the course of work.

Training, education, and job programs will be crucial in helping these displaced persons find a new place in America's economic mainstream.

Many fruit and vegetable harvest areas and a few home base communities are sections of sizable industrialization, urbanization, and sound economic health.

They are capable of using former farmworkers in some useful capacity—if timely, organized efforts of assistance are made to train displaced workers for nonfarm employment. (2)

Hail Hits Wheat, Corn, Soybeans, Tobacco, and Cotton the Hardest

Hail means farewell to about \$284 million worth of U.S. farm products each year. The estimate is based on 20-year loss rates and current crop output and price levels. It was not adjusted to any possible price level had the destroyed crops been added to marketed supplies.

Heavy as they are, however, crop losses from hailstorms average only about 1.3 percent of the total value of our annual crop production. And the bulk of all hail losses are to wheat, corn, soybeans, tobacco, and cotton.

Hailstones are financially most shattering in the Northern Plains Region. Its 3.5-percent rate of hail loss (an estimated \$86.7 million yearly) is the highest nationwide.

Next highest rate of loss, 2.5 percent of crop output, is in the

Mountain Region.

In the Corn Belt, hail damage averages only 1.2 percent of the crop. But the dollar amount of damage is large (an average close to \$68 million annually) because of the high value of crops grown there.

In both amount and rate of hail losses, the Lake States and Appalachian Regions rank fourth and fifth among the Nation's 10 agricultural regional areas.

States that sustain the greatest dollar amount of hail damage to crops are North Dakota, Nebraska, Kansas, Iowa, and Minnesota.

The United States and several other countries have been conducting hail suppression experiments in recent years. And some of this research has shown that it is technically possible to modify the formation and size of hail-stones.

Despite differing opinions about the potentials of such experiments, interest in them continues. U.S. plans for further study are now being appraised by the Interdepartmental Committee on Atmospheric Science of the Federal Council for Science and Technology.

Meanwhile most of America's farmers aren't gambling on any sudden cessation of hailstorms. Many continue to invest heavily in insurance as the best hedge against the hazard of hail.

Crop hail insurance bought last year reached a new high of about \$3½ billion in coverage. This represented nearly 16 percent of the \$22.4 billion estimated value of all crops harvested—many of which are not subject to hail damage.

For this protection against hail, reports from representative private insurance companies indicate that farmers paid out a record \$126 million in premiums. Losses from hail damage in 1968 were 55 percent of premiums, compared with the 1934-68 average of about 61 percent. (3)

Farmers No Exception to Adage, It Takes Money To Make Money

It takes a lot of capital to make a decent living farming.

A recent study in Wisconsin by the USDA's Economic Research Service and the University of Wisconsin indicates a minimum total investment of \$40,000 is needed to give returns to labor and management exceeding the poverty level.

Types of farms studied were three sizes of dairy farms, combination dairy and hog farms, general livestock farms, beef farms, hog farms, and crop farms.

Typical Wisconsin State dairy farmers and their families who produced grade A milk in eastern Wisconsin earned about \$4,300 in 1967 with a total investment of \$90,000.

Grade B producers in western Wisconsin earned \$3,500 with an investment of \$50,000.

In 10 years—from 1957 to 1967—the investments of these dairy farmers rose over 70 percent, with land and buildings accounting for two-thirds of the increase.

By 1967 operators of these typical grade A and grade B dairy farms were earning \$1.23 and \$1.11 per hour, respectively.

Among above-average Wisconsin dairy farmers, investments ranged from \$74,000 for a group with 26 cow herds to \$211,000 for a group with 76 cow herds. Operator and family labor income for these groups were \$4,400 and \$11,100 in 1968.

Above-average farms in the other six farm types showed an investment range from \$117,000 to \$190,000 with income ranging from \$7,900 to over \$13,000.

Operator and family labor income averaged 6 percent of total investment for all eight farm types. The percentage among seven farm types varied only from 5.5 percent to 7.0 percent. (4)



Want a nonfarm job? People in the countryside no longer need to migrate in seek of off-farm jobs. Rural gains in private nonfarm jobs are topping those in cities.

Joe Jones, recently graduated from a rural high school, is looking for a nonfarm job.

Ten years ago his first step might have been to get a bus ticket to the nearest big city—because that's where virtually all the nonfarm job opportunities were.

But now there's a better chance Joe might land a nonfarm position in or near his home town. Gains in private nonfarm jobs averaged 5 percent a year in rural and semirural counties during the early 1960's—outpacing the 4-percent rate for metropolitan counties.

That doesn't mean that private nonfarm jobs now abound in rural areas. Metropolitan counties still contained about threefourths of the private nonfarm jobs covered by social security.

The covered employment base of rural and semirural counties was only about a tenth of the Nation's private nonfarm total. Thus, the faster rate of gain outside cities merely meant that 11 percent of the new jobs that opened up in the early 1960's were in rural areas.

Even so, the quickening pace of rural job expansion represents a significant rounding out of the larger number of nonfarm jobs that still open up fastest in and around cities. And the job growth has probably played a part in the recent slowdown in outmigration from low income rural areas.

Not all rural counties, however, are enjoying rapid nonfarm job gains. Of the 2,000 U.S. counties that are classified as rural or semirural, only 1,000 added enough private nonfarm jobs in the early 1960's to offset local losses in

farm opportunities.

Half of the 1,000 counties with growing off-farm job opportunities were near metropolitan places, suggesting possible spill-over effects from economic interactions and commuting. Still, the other 500 rapidly growing rural counties were geographically isolated from metropolitan centers and were growing in response to what must have been local business activity.

The industrial North is one of the two major geographical areas displaying a more highly developed general level of business activity than the Nation as a whole. Further gains in job opportunities and continued decentralization are resulting in substantial gains in nonfarm jobs in the few rural and partly rural counties scattered through the region.

The metropolitan west coast is the other major strip where economic activity is more highly developed. But growth is mainly metropolitan, not rural.

The industrializing upper South still has a level of general business activity lower than that for the United States as a whole. But growth of manufacturing is leading to rapid gains in nonfarm job opportunities for rural residents. About two-thirds of the rural and semirural counties registered moderate to major gains in nonfarm jobs during the early 1960's. In addition, agricultural production has been expanding faster in this Region than in the Nation as a whole.

Outside these three areas lie many of the 1,000 rural or partly rural counties where nonfarm job opportunities didn't open up fast enough to take up the slack in farm employment.

These counties extended from central Appalachia westward through the Ozarks and then fanned out to include large portions of the Plains and Mountain States. Part of the lower South and the cutover area west of the Great Lakes were in trouble, too.

What can be done to help the residents of slower growing, lower income counties find jobs?

ERS economists suggest that while training programs for workers and plant location and management programs for businessmen are needed, neither will solve the problem.

There also has to be local group action relating to roads, schools, zoning, taxes, credit, residential construction, industry location, and community facilities.

Regional problems of creating job opportunities for rural residents might best be dealt with by working through labor market and trade areas within commuting distance of the rural residents—rather than by working with isolated families, firms, or even with towns and counties.

Jobs do not have to be created in the backyards of rural Americans, or even in their home county—as long as they are created within commuting distance. (5)

Land, Lots of Land Under Starry Western Skies, Gets Fenced In

City planners in the western United States can figure each new citizen they gain will add .05 acre to their city's girth.

In the countryside, where land is used less intensively, a new resident will take roughly .13 acre of land.

These are some highlights of a recent ERS study of land in 48 counties in eight western States.

ERS researchers used airphotos to examine the amount and type of land passing from rural uses—such as farming—into urban uses—such as housing.

During an 11-year period spanning the 1950-60 decade, people moved onto about 465,000 acres of rural land in the survey area. But they used it for urban pursuits.

A high proportion of this land—about three-fourths—was pre-

viously devoted to crop production, usually of high-valued irrigated crops. In some Califronia counties, all of the land came from cropland.

Most counties urbanized some of their grassland, the quality varying from productive pasture to near-desert. However, in only a few of the counties did the proportion of grassland converted exceed 50 percent.

Seattle and Portland were the only areas where significant amounts of forestland were shifted to nonrural uses.

Only a little more than 2 percent of the land in the whole study area had lain idle prior to urbanization.

Most of the converted land went into dense residential use—homes with less than an acre surrounding them, apartments, and row houses. Some 13 percent was used for homes on 1-acre or larger lots. The rest became shopping centers, factories, parks, airports, and the like.

Altogether, for each 1 acre going to residential use, about .15 acre was developed for commercial, industrial, institutional, recreational, and airport use.

To trace the differences in patterns of urbanization and intensity of use between counties in urban complexes and those around cities, the ERS researchers classified the 48 counties according to their relationship to a Standard Metropolitan Statistical Area (SMSA).

A SMSA is a county or group of counties defined by the Census Bureau as an entire area in and around a city or community of at least 50,000 with an integrated economic and social system.

In multicounty SMSA's (such as Los Angeles and the area around it), land use rates ranged from .03 acre per new person to .25 acre. In single county SMSA's, they varied from .05 to .13. And in rural counties containing no SMSA, rates varied from .02 acre to .35 acre. (6)

Accident Prone

What's the difference between a Little Leaguer who breaks his leg on a rough sandlot in a rural area in Michigan and the Little Leaguer who breaks his leg on a well-kept diamond in a more urban county?

The "country" boy stands a better chance than the city boy of getting a bed in a hospital.

This is one of the conclusions drawn from a study of general hospital beds available per 1,000 people in Michigan. (Special care beds—such as those in military base hospitals, student health facilities, or mental hospitals—were not included.)

Results of the study indicate that the availability of general hospital beds increases as the geographic location changes from the more urban to the more rural.

There's also more likelihood of finding an empty hospital bed if a county has a town of 5,000 or more. But this likelihood is enhanced the further away a county is from a city of 25,000.

These specific findings run counter to the usual assumption that rural regions lag behind metropolitan areas in general hospital facilities. Yet they often do, of course.

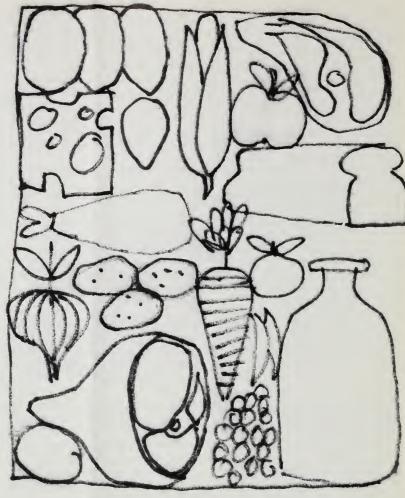
Rural areas with a preponderance of people over 60 years old are a case in point, in Michigan as elsewhere—as older people tend to require more hospitalization than young people.

Also—regardless of geographic location—there's usually a direct relationship between the number of hospital beds per 1,000 people and the amount of money spent on health and hospitals.

Migration from country to city, therefore, seems to be the basic reason for increased availability of hospital beds in some rural areas.

Metropolitan centers with greater-than-average growth may have trouble increasing hospital facilities as fast as the populace is increased through migration.

But people who leave rural areas don't take their hospital beds with them. Thus, rural areas with populations decreased by outmigration may have a relatively larger number of beds without any expansion of hospital facilities. (7)



MARKETING'S BITE OF FOOD BILL

Cost of getting our Nation's food from farm gate to consumer ran over \$60 billion last year. Hikes in labor costs contributed most to 5-percent rise in marketing bill.

When they left the farm gate last year, U.S. foods were worth some \$28.9 billion.

By the time they reached consumers, their worth had swelled to \$89.5 billion—through the addition of marketing services costing \$60.6 billion.

The marketing bill—the cost of getting the Nation's food supply from farmers to consumers—was some 5 percent, or \$3.1 billion,

bigger in 1968 than the year before. During most of the 1958-68 decade, the average annual increase in the bill's size amounted to 4.1 percent.

Higher costs for labor, materials, and other goods and services used by food marketing industries sparked most of the 1968 gain.

Growth in the volume of food moving through the marketing system accounted for about a fourth of the 1968 increase. (Volume generally plays a bigger role. Since 1957–59, food marketings have grown 22 percent in volume and have been responsible for almost half of the \$18.4 bil-

lion boost in the marketing bill since 1959.)

Here's a rundown of the various components of the marketing bill of last year.

Labor cost. The cost of labor makes up by far the biggest part of the total 1968 marketing bill. Last year it represented 45 percent of the total bill, compared with 44 percent in 1967 and 43 percent back in 1958.

Labor used by assemblers, manufacturers, wholesalers, retailers and eating places cost \$27.3 billion in 1968—\$2.2 billion, or 9 percent, more than the year before. The average annual increase in labor costs during the

last decade has amounted to 5 percent. There were hikes in labor costs for retail food stores and eating places last year.

While labor costs per hour of work rose 58 percent between 1957-59 and 1968, the labor cost per unit of product averaged only 27 percent higher—the result of steady increases in output per man-hour.

Rail and truck transportation. Costs of shipping farm food products by rail and truck (excluding local for-hire traffic) amounted to 8 percent of the 1968 marketing bill—or 2 percent less than in 1959. In dollars, the bill rose from \$4.0 to \$4.6 billion.

In general, railroad freight rates for farm food products trended downward from 1957-59 to 1967, then turned upward in 1968.

The Interstate Commerce Commission granted the railroads a general freight rate increase of 3 percent in late 1967, and selective increases ranging from 3 to 10 percent in 1968.

Corporate profits. Profits earned by corporations from handling the products included in the marketing bill amounted to \$3.6 billion in 1968 (before income taxes). This was \$0.5 billion—16 percent—more than the year before.

Before-tax profits amounted to 5.9 percent of the marketing bill in 1968, compared with 5.4 percent in 1967.

After-tax profits last year came to 50 percent of the before-tax total, compared with 52 percent in 1967. The 10-percent surtax on corporate income tax, effective January 1, 1968, was responsible for most of the decrease during the period.

Miscellaneous costs. Advertising, business taxes, depreciation, interest, rent and repairs, bad debts, and contributions cost the marketing industry \$9.8 billion in 1968, compared with \$9.2 billion in 1967—a rise of 6.5 percent. Advertising, business taxes,

and depreciation are the most important of these. They added up to \$6.5 billion last year.

Such miscellaneous costs per dollar of sales vary considerably by the type of food marketing firm. They range from a low of 2.3 cents for wholesalers to a high of 12.8 cents for eating places. Rent, business taxes, and depre-

The Bill by Commodity

The cost to consumers of most major food groups was 5 to 6 percent higher in 1968 than a year earlier—as farm values rose for many commodities and marketing charges were up for all.

Fruits and vegetables. Higher farm prices—up 9 percent from 1967 due to reduced supplies—and an increase of 5 percent in the marketing bill caused a 6-percent hike in consumer expenditures last year.

Grains and cereals. Farm values dropped 5 percent from 1967 for grain mill products and 3 percent for bakery items, due mainly to the lower farm price for wheat. But gains of 3 percent and 6 percent, respectively, in the two groups' marketing costs moved expenditures for grain mill goods up 1 percent and those for bakery products up 5 percent.

Meat. Consumer spending on meat products in 1968 averaged 6 percent higher than a year before, as both the farm value and marketing bill rose 6 percent.

Poultry and eggs. Although the volume marketed was down, an 8-percent increase in the farm value and a 2-percent boost in the marketing bill caused their cost to consumers to advance 5 percent over 1967's level.

Dairy products. Sharp rises in both farm value—up 7 percent—and marketing charges—up 10 percent—caused an 8-percent boost in consumer expenditures.

Miscellaneous products. The cost to consumers of foods in this group averaged a little less than 2 percent higher last year than in 1967. The farm value dipped about 2 percent, partly because of lower soybean prices. However, marketing charges were some 2 percent higher than the year before, (9)

ciation are much larger for eating places than for other types of marketing firms.

Miscellaneous costs, as a group, have gone up faster than sales for every type of food marketing firm. Boosts in business taxes per dollar of sales are due partly to higher social security and property taxes. Rent raises for processors, retail stores, and eating places—are due partly to an upsurge in use of rental equipment and facilities.

The cost of many goods and services used by the food marketing industry cannot be measured with precision.

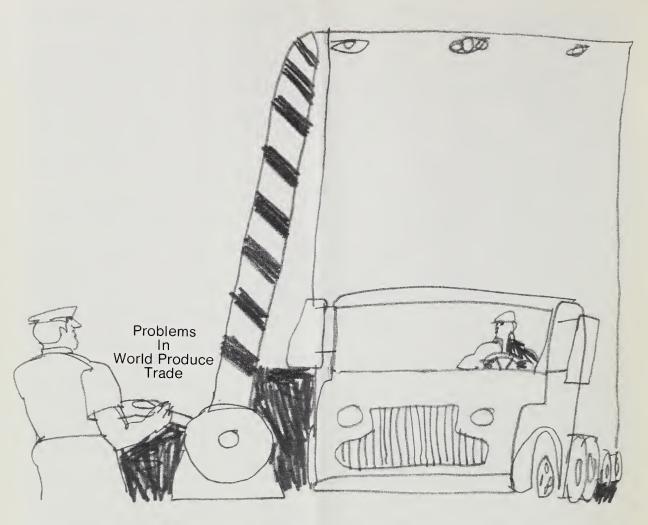
ERS economists figure that packaging and labeling materials may have accounted for \$7 billion of the 1968 marketing bill, and costs connected with institutional feeding, \$4 billion. Some other items in the \$15.3 billion residual component are utilities, fuel, insurance, and intracity for-hire transportation.

The marketing bill: today and yesterday. Between 1959 and 1968, the marketing bill swelled by \$18.4 billion or 44 percent.

Labor costs were up \$9.5 billion—or half the total rise—as the food industry hired more workers and paid them higher wages to process a larger volume of foods. However, labor costs have not risen as rapidly as most other major components of the marketing bill.

About \$4.1 billion, or a fifth of the increase, in the marketing bill between 1959 and 1968, stemmed from rising depreciation, business taxes, avertising, interest, repairs, bad debts, and contributions. Depreciation, rent, and advertising expenses rose around 60 percent, while business taxes almost doubled and interest increased 150 percent.

Profits accounted for \$1.5 billion of the increase since 1959. Transportation added \$0.6 billion—or 15 percent—the smallest percentage gain of any component in the marketing bill. (8)



A business whose trade crosses international boundaries frequently has to adjust to competition and supply situations. Vegetable and fruit enterprises are no exception.

A wave of economic development and consumer affluence since World War II has been a boon to the world exchange of fruits and vegetables. World trade in the two groups of commodities has about tripled in the past 2 decades.

New markets have been tapped. Traditional ones have been expanded. And prospectors in potential production areas have come up with some unexpected additions to conventional supplies.

All these activities have led to a stiffening of inter-country competition. They've also caused some upheavals-either temporary disruptions or longer term shiftsin the trade situation.

A switch in the position of U.S. vegetable trade is an example.

Our exports of vegetables rose from \$135.7 million in the 1961/ 62 marketing year to nearly \$170 million in 1968/69. But imports during the period soared from only \$88 million to about \$204.8 million-with fresh winter produce accounting for most of our changeover to a net importer.

Such changes (and they occur in other countries, too) don't happen overnight-though trend is sometimes triggered by an "emergency situation that may be perpetuated.

The first signals of production area shifts most often come from reports of fresh produce receipts in terminal markets wherever they may be.

The case is similar for processed products.

New products with reaching industry implications have a way of getting on the market shelves before trade circles fully realize that important industry changes have been set in motion.

It has been difficult enough to keep track of trade developments on the home front. And now the U.S. fruit and vegetable industry—like so many other enterprises—has internationalized its operations. This makes trade horizons even more hazy than before.

In hindsight, most shifts of trade toward the import side occur (1) when imports are substituted for homegrown products; (2) traditional customers for exports divert their purchases to other suppliers; or (3) an importing country increases imports of items it does not itself produce in commercial volume.

The first two reasons for changes in trade flows are of direct concern to our U.S. fruit and vegetable industry today. For example:

—Competition from Mexican tomatoes and other winter produce with "home" produced items has increased markedly in the past 5 years. At the same time, exploitation of foreign markets by Mexico's vegetable industry is reducing our own export opportunities—especially in such a traditional U.S. export market as Canada.

-Our vegetable processing sector is experiencing similar, if not more severe, stress to which it must readjust. Canned tomato products are a case in point. Not only has Mexico increased its capability for putting out these products, but the Mediterranean area has accelerated output so much that it has cut deeply into our export shipments to the European market and is invading the Canadian market and our own as well.

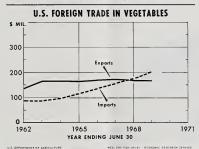
—Asparagus is a dramatic example of a temporary situation turning into a long term trend. After the tightening California labor situation in the early

1960's, our 9-million case asparagus pack fell off about 2 million cases.

Taiwan moved in to fill the gap. And it stayed in. Taiwan's production has risen from only 3,000 cases in 1963 to a present level of over 3.5 million, much of which now competes against us in the West German market. (Mushrooms and pineapple are other crops in which Taiwan has displayed an aggressive interest.)

These and comparable situations presage a difficult phase of adjustment for the U.S. vegetable industry—and the fruit industry as well.

Transcending national boundaries is one way of coping with competition. And certain fruit and vegetable firms—especially those engaged in processing—



have already set up production centers at strategic points throughout the free world.

To surmount trade barriers of the European Community, for example, some U.S. companies have moved their processing plants to favored European locations and proceeded to acquire a share of the market. The recent reversed trade flows for certain commodities from the Continent to the United States may well be an indication of the economic success of these operations.

Changes in national import and export policies offer other, though limited, possibilities of adjustment.

And changes made by industry itself in the use of capital, labor, and technology can be expected to further alter competition. (10)

Proposed Textile Labeling Would Alert Europeans to Fiber Content

Following the lead of the United States, a proposal for uniform textile definitions by fiber content is being considered by the ministerial council of the 6-country European Community.

If adopted, the regulation would protect West European consumers from false or misleading statements about fabrics. It would also make it easier for them to choose "the right" fabric from hundreds of natural and synthetic blends now on the Continental market.

From the Community's view as a whole, adoption of the proposals would probably ease some of the intra-area problems associated with difference in member countries' textile definitions.

All fibers—not just pure fibers such as wool, silk, or linen—would be named and meet defined specifications.

"Textiles" are defined in the draft directive as all raw, semi-processed, processed, semi-manufactured products made only of textile fibers.

"Textile products" are: Items in which textile fibers make up 80 percent of the weight; textiles used in furniture, umbrellas, parasols, footwear, and floor coverings of several layers; and textiles comprising an integral part of other products.

Adoption of the proposals are not expected to have any significant impact on the U.S. position in regard to definitions of fiber content. Imported textiles must meet domestic labeling laws.

Present U.S. textile labeling laws, administered by the Federal Trade Commission, require that the exact fiber content of fabric be specified in percentage terms in descending order. These proportions may allow for a deviation of about 3 percent. In addition, fibers must be identified by generic name. (11)

USDA's National School Lunch Program makes lunch boxes obsolete for millions of schoolchildren. Breakfast and special milk programs benefit our youngsters, too.

"There's the school bus. Goodby. Button your coat. Goodby. Good luck with your arithmetic. Goodby."

The door closes. The kids are off. Mother starts to turn back to her chores and sees a lunch box —forgotten on a chair.

This domestic disaster has been enacted countless times in countless homes. But it happens far less often than it used to. Not that youngsters these days are any less forgetful. But more of them are getting lunch at schools participating in USDA's National School Lunch Program.

Final figures for the last school year aren't in yet. But during 1967/68, some 3.2 billion NSLP lunches were served to nearly 18.8 million U.S. schoolchildren. Thirteen percent of the meals were served free or at a reduced price to needy children.

Compared with the previous year, the number of meals in 1967/68 was up 2 percent; free or reduced-price meals increased 81/2 percent. Three times as many meals were served in needy schools (where free or reducedprice meals accounted for 54 percent of the total).

Data for the first 9 months of the year ending June 30, 1969, indicate a big step-up in the number of lunches served in needy schools.

By March 1969 over five times as many meals were being served to six times as many children. And for the NSLP as a whole, the proportion of free or reducedprice lunches in March 1969 was up to 16 percent of the total lunches served in schools.

The National School Lunch Program provides a nutritious midday meal for many youngsters. But it also gives them much, much more than food.

Once students start getting good lunches, teachers report improvements in children's appearance, classroom alertness, and school attendance.

For much of its 23 years of operation, the National School Lunch Program provided many needy children with their only well-balanced meal of the day.

However, in January 1967 the Department of Agriculture initiated a Breakfast Program, too.

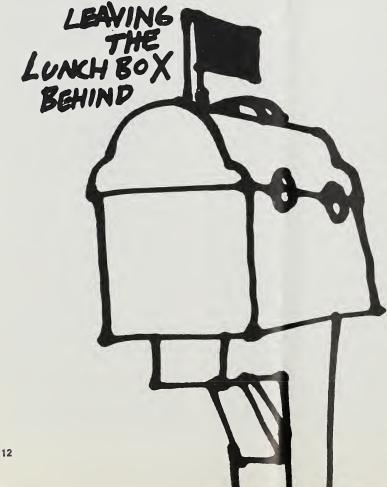
Before the advent of the Program, Breakfast children were hungry before they even started their school day. In many cases, they'd had no breakfast because their families could not afford to serve them. In other cases—especially in rural areas -children traveled such long distances that their breakfasts had worn off during the lengthy trip to school.

During 1967/68, the first full year of the Breakfast Program's operation, a daily average of 168,000 children in 1,325 schools were served 16 million breakfasts.

Over 70 percent of these meals were served free or at a reduced price. The Federal payment totaled \$2 million—about 12½ cents per breakfast.

This program has expanded sharply. Nearly three and a half times as many breakfasts were served in 9 months of 1968/69 than during the same period the previous year.

In addition, the Special Milk Program, another USDA endeavor, served some 3 billion



pints of milk during 1967/68 to children in 88,000 schools and 6,000 childcare centers.

During the first 9 months of 1968/69, the total milk served was down about 4 percent from a year earlier—partly because many schools replaced their "milk only" program with the full NSLP midday meal. (12)

Food Spending Takes Ever Less Of Consumer's After-Tax Income

The percentage of our incomes spent for food slipped another notch last year—down to 16.8 percent of per capita after-tax earnings. And while that was only a shade under the 1967 level, it was substantially less than the 20.9 percent spent back in 1958.

During the 1958-68 decade, food bills per person in the

United States grew by 29 percent—rising from \$382 to \$494 annually. However, the increase in food spending was small compared with the 60-percent rise in our after-tax incomes. They were up to \$2,933 per person last year from \$1,831 a decade earlier.

Higher food prices accounted for only a part of the rise in the food bill over the decade. Food prices (including restaurant meals) increased about 17 percent. Consumers also substituted relatively expensive foods for cheaper ones. They also expected—and paid for—more marketing services with their foods.

The big difference in personal spending today, though, lies in our outlays for goods and services other than food.

Housing, clothes, and all the other nonfood goods and services we we buy took \$2,174 in 1968—or 69 percent more than in 1958.

Since these expenditures rose more than after-tax incomes during the period, they now claim a larger portion of the total—74 percent versus 70 percent.

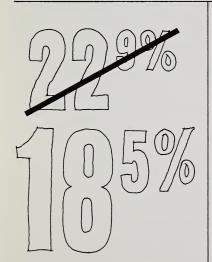
Prices for nonfood items rose 22 percent during the 1958-68 decade and accounted for about a third of the rise in per capita expenditures.

Our spending on clothing and shoes, of interest to agricultural producers, averaged \$230 per person in 1968—up 8 percent from a year earlier. However, these expenditures accounted for about 8 percent of disposable income in both years and also in 1958.

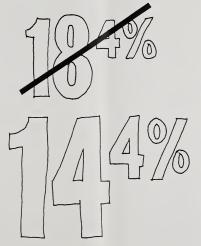
Consumers also spent about \$48 per person for tobacco in 1968—1.6 percent of after-tax income. Expenditures for tobacco took about 2 percent of per capita disposable incomes in most years since World War II. (13)

WHAT DOES FOOD COST? Last year Americans spent an average of about: (a) 14 cents, (b) 17 cents, or (c) 19 cents of every dollar on food.

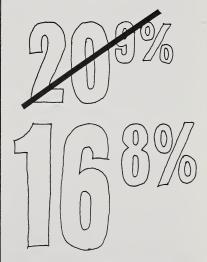
Each of the above figures is correct because there are many ways to measure how much of our income goes for food. It all depends on the starting point. Three of the most commonly used measures of our food costs are shown in the illustration below. (14)



Share of consumer expenditures per person spent for food in 1968. Consumer expenditures are our day-to-day living costs. In 1958 we spent 22.9 percent on food.



Share of total income per person spent for food in 1968. Total income is income before taxes. By comparison, in 1958 we spent 18.4 percent on food.



Share of disposable income per person spent for food in 1968 is our take-home pay, after taxes. In 1958 we spent 20.9 percent on food.

FARM MACHINERY AND EQUIP-MENT ON COTTON FARMS, MISSIS-SIPPI RIVER DELTA COTTON AREA, 1966. B. Bolton, Farm Production Economics Division and others, in cooperation with Louisiana Agricultural Experiment Station. La. Agr. Expt. Sta. D. A. E. Res. Rept. 399.

This report summarizes farm machinery data from 585 farms in the Mississippi River Delta. There are well recognized limitations in using survey data for developing machinery cost information.

However, reported farmer experience should have some usefulness as a guide in developing more refined cost estimates.

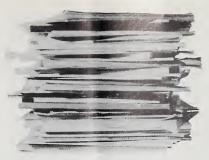
FOOD AID AND AGRICULTURAL DE-VELOPMENT. F. D. Barlow, Jr., and S. A. Libbin.

The less developed countries received \$17.5 billion worth of agricultural commodities from the United States under aid programs during 1955–66, nearly all of it under P.L. 480. Agricultural production in these countries has increased considerably over the past decade, but in many cases not enough to meet the demands resulting from rising populations and increased per capita incomes.

THE AGRICULTURAL SITUATION IN WESTERN EUROPE: MIDYEAR REVIEW. Foreign Regional Analysis Division. ERS-For. 276.

Agricultural production in Western Europe this year is likely to approximate the 1968 record.

As of early July, crop production is expected to be somewhat lower than last year's level but livestock and poultry output will



RECENT PUBLICATIONS

The publications listed here are issued by the Economic Research Service and cooperatively by the State universities and colleges. Unless otherwise noted, reports listed here and under Sources are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D.C. 20250. State publications (descriptions below include name of experiment station or university after title) may be obtained only by writing to the issuing agencies of the respective States.

probably increase slightly.

REVISED ESTIMATES OF TAXES LEVIED ON FARM REAL PROPERTY, 1950-67. T. F. Stinson, E. L. Courtney, and R. Bird, Economic Development Division. SB-441.

Revision of earlier State-by-State estimates of farm real estate taxes paid shows little change from previous estimates in either tax per acre or tax per \$100 of full value.

PROCESSING, STORAGE, AND SE-

LECTED STORAGE SERVICE COSTS FOR FIRE-CURED, TYPES 22 AND 23, AND DARK AIR-CURED, TYPES 35 AND 36, TOBACCOS IN COMMERCIAL FACILITIES, 1966/67 AND ESTIMATED 1968. N. A. Wynn, Marketing Economics Division. ERS-414.

These processing firms machine redried about 17.7 million pounds of green-weight tobacco with a redried weight yield of better than 88 percent.

AGGREGATE SUPPLY RESPONSE FOR EASTERN COLORADO WHEAT FARMERS. H. G. Sitler, Farm Production Economics Division, and M. D. Skold, Colorado State University. Colo. Agr. Expt. Sta. Tech. Bull. 104.

This bulletin reports the findings of a study made to determine the acreage and supply of products from wheat farms in eastern Colorado at varied wheat and feed grain prices.

THE AGRICULTURAL SITUATION IN COMMUNIST AREAS: MIDYEAR REVIEW. Foreign Regional Analysis Division. ERS-For. 277.

The outlook for 1969 agricultural production in Communist areas is generally favorable. Despite difficulties with the fall-sown and early-sown spring crops in many countries, favorable conditions for major spring crops were widespread.

Livestock production stagnated and even declined in some countries during the first half of 1969, but a better feed outlook and increases in livestock numbers are expected to boost output the second half. The Communist agricultural situation at midyear was generally favorable.

Numbers in parentheses at end of stories refer to sources listed below:

1. Velmar W. Davis (SM); 2. Calvin L. Beale (SM); 3. Lawrence A. Jones (SM); 4. N. D. Kimball and William Saupe (SM); 5. Clark Edwards (SM); 6. Henry W. Dill, Jr. and Robert C. Otte, Urbanization of Land in the Western States (M); 7. Leon B. Perkinson (SM); 8 and 9. Jeannette Findlay and Leland W. Southard, "The Bill for Marketing Farm-Food Products," Mark. and Trans. Sit., MTS-174 (F); 10. Kenneth Farrell (SM); 11. Edward H. Glade, Jr. (SM); 12. Helen

M. Eklund, "USDA Domestic Food Programs," Nat. Food Sit., NFS-129 (P); 13. Marketing and Transportation Situation. MTS-174 (P); 14. Henry T. Badger (SM); 15. Norris T. Pritchard and Nick Havas (SM).

Speech (S): published report (P); unpublished manuscript (M); special material (SM); *State publications may be obtained only by writing to the experiment station or university cited.

ECONOMIC TRENDS

	UNIT OR BASE PERIOD	'57-'59 AVERAGE	1968		1969		
ITEM			YEAR	AUGUST	JUNE	JULY	AUGUST
Prices: Prices received by farmers Crops Livestock and products Prices paid, interest, taxes and wage rates Family living items Production items Parity ratio Wholesale prices, all commodities Industrial commodities Farm products Processed foods and feeds Consumer price index, all items Food	1910-14=100 1910-14=100 1910-14=100 1910-14=100 1910-14=100 1910-14=100 1957-59=100 1957-59=100 1957-59=100 1957-59=100 1957-59=100 1957-59=100	242 223 258 293 286 262 83 ———————————————————————————————————	261 229 288 354 335 292 74 108.7 109.0 102.2 114.1 121.2	261 225 292 355 337 292 74 108.7 108.9 101.4 114.9 121.9	284 231 329 375 351 308 76 113.2 112.2 111.2 121.4 127.6 125.5	282 224 332 374 352 305 75 113.3 112.4 110.5 121.2 128.2 126.7	279 220 330 373 352 304 112.7 108.9 121.5
Farm Food Market Basket: ¹ Retail cost Farm value Farm-retail spread Farmers' share of retail cost	Dollars Dollars Dollars Percent	983 388 595 39	1,118 435 683 39	1,132 439 693 39	1,176 495 681 42	1,190 496 694 42	51,199 5495 5704 541
Farm Income: ² Volume of farm marketings Cash receipts from farm marketings Crops Livestock and products Realized gross income ³ Farm production expenses ³ Realized net income ³	1957-59=100 Million dollars Million dollars Million dollars Billion dollars Billion dollars Billion dollars	32,247 13,766 18,481 — —	126 44,386 18,847 25,539 51.1 36.3 14.8	128 3,682 1,521 2,161 — —	107 3,447 1,132 2,315 55.1 38.8 16.3	125 3,838 1,455 2,383 — — —	127 4,000 1,600 2,400 —
Agricultural Trade: Agricultural exports Agricultural imports	Million dollars Million dollars	4,105 3,977	6,228 5,028	489 442	512 430	500 434	=
Land Values: Average value per acre Total value of farm real estate	1957-59=100 Billion dollars	=	=	⁶ 176 ⁶ 199.3	=	=	⁷ 179 ⁷ 202.6
Gross National Product: 3 Consumption 3 Investment 3 Government expenditures 3 Net exports 3	Billion dollars Billion dollars Billion dollars Billion dollars Billion dollars	457.3 294.2 68.0 92.4 2.7	865.7 536.6 126.3 200.3 2.5	= = =	924.8 572.8 137.4 212.9 1.6		
Income and Spending: 4 Personal income, annual rate Total retail sales, monthly rate Retail sales of food group, monthly rate	Billion dollars Million dollars Million dollars	365.3 17,098 4,160	687.9 28,309 6,106	696.1 28,760 6,188	746.1 29,371 6,278	751.4 29,157 6,283	756.6 29,327
Employment and Wages: Total civilian employment Agricultural Rate of unemployment Workweek in manufacturing Hourly earnings in manufacturing, unadjusted	Millions Millions Percent Hours Dollars	63.9 5.7 5.8 39.8 2.12	75.9 3.8 3.6 40.7 3.01	76.0 3.8 3.5 40.7 2.99	77.7 3.7 3.4 40.7 3.17	77.9 3.6 3.6 40.7 3.19	78.2 3.6 3.5 40.6 3.18
Industrial Production:4	1957-59=100	_	165	165	174	175	174
Manufacturers' Shipments and Inventories: Total shipments, monthly rate Total inventories, book value end of month Total new orders, monthly rate	Million dollars Million dollars Million dollars	28,745 51,549 28,365	50,310 88,579 50,597	49,825 86,713 50,201	54,786 92,215 53,861	54,811 93,106 55,116	=

Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1959-61—estimated monthly. ² Annual and quarterly data are on 50-State basis. ³ Annual rates seasonally adjusted second quarter. ⁴ Seasonally adjusted. ⁵ Preliminary. ⁶ As of November 1, 1968. ⁷ As of March 1, 1969.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

UNITED STATES GOVERNMENT PRINTING OFFICE DIVISION OF PUBLIC DOCUMENTS, WASHINGTON, D.C. 20402

OFFICIAL BUSINESS



499

J M GWINN 72 FREDERICK LANE ST LOUIS MISSOURI

63122

To stop mailing \square or to change your address \square send this sheet with new address to The Farm Index, OMS, U.S. Department of Agriculture, Rm. 1459, Washington, D.C. 20250.

Tourist Fare aing and sunning make ty appetites. This is a

Swimming and sunning make for hearty appetites. This is a pleasing axiom for Bahama hotel and restaurant owners whose economic wellbeing echoes the clink of the tourist dollar in the till.

The tourist is easy to spot straw hat covered with clusters of sea shells or dangling corks, sun glasses, and floppy sandals.

But it's the less obvious characteristics that are of more interest to the Bahama entrepreneur. For example:

The typical tourist stays about 6 days. He spends nearly \$175, not counting transportation.

And he eats.

Tourists in the Bahamas in 1968 ate about as much as an American city of 18,000 people ate all year.

Almost 1.1 million tourists visited the Bahamas in 1968 (and 88 percent of them were Americans). By 1975, tourists are expected to eat as much as the population in a city of 33,000 "back home." (Presumably because more tourists will be there to eat—about 2 million in all—not because each tourist will eat more.)

Those who cater to tourists have learned that American steaks tempt tourists more than native concoctions. Thus, local food wholesalers often face stiff competition from Miami and New York suppliers for space.

Many Bahamian restaurants and hotels are already part of big American chains that import food directly from their Florida warehouses. One U.S. restaurant chain airships over half a ton of beef from Miami each day to its Nassau and Freeport outlets. (15)

Contents	page
THE FARM. Machines in the Vegetable Garden—Less	
backbreaking hours in sight for '75.	3

RURAL LIFE. Help Wanted: Apply Within Rural America—Rural gains in off-farm jobs speed up.

MARKETING. Marketing's Bite of Food Bill—High labor costs add to rise in farm-to-consumer expenses.

THE FOREIGN SCENE. Problems in World Produce Trade
—Adjustments needed in alobal competition.

THE CONSUMER. Leaving the Lunch Box Behind—Food for thought through School Lunch Programs. 12

Numbers in parentheses at end of stories refer to sources listed at end of issue.

The Farm Index is published monthly by the Economic Research Service, U.S. Department of Agriculture, October 1969, Vol. VIII, No. 10

The contents of this magazine are based largely on research of the Economic Research Service and on material developed in cooperation with State agricultural experiment stations. All articles may be reprinted without permission. For information about the contents, write the editor, The Farm Index, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250. Use of funds for printing this publication approved by the Director of the Bureau of the Budget, May 24, 1967. Subscription orders should be sent to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 20 cents (single copy). Subscription price: \$2.00 per year; 75 cents additional for foreign mailing.

EDITOR, Audrey Ames Cook; ASSISTANT EDITOR, Geraldine Schumacher; STAFF EDITORS, Stan Baer, Mary Jane Casey, Walter M. Patrick,

10